

## Exploring and Using Digital Collections

Many institutions such as libraries, museums and galleries have growing volumes of digital collections. These include items which were 'born digital', such as software and digital art, as well as items which have been digitised through processes such as digital photography and scanning, or digital recording.

This year, Student Design Challenge participants are asked to apply their talents to address a real-world problem faced by State Library Victoria (SLV). SLV is the central library for the state of Victoria (Australia), located in central Melbourne. Like many cultural institutions, SLV wants to make it easier for people to discover items in its collection. At any one time only 5% of the physical collection is on the open shelves; the rest is in storage. Likewise, with a vast array of digital items, there is no easy way to see the breadth of the collection. An important challenge facing SLV is to make items more visible to people who visit the library both onsite and online, in the same way that people might discover books by browsing the shelves, or learn about an artist's works by happening upon an exhibition.

Furthermore, learning about the existence of a digital work is not enough: people want to be able to make use of these items. They might want to take them home to enjoy or show others, or repurpose them in their own creations. An important aspect of this challenge is to enable people to easily transport discovered items to their own devices so that they can take them offsite, manipulate them, and recombine them in novel ways.

## The Challenge

Your challenge is to help library users (whether onsite or offsite) to explore digital collections, to discover and use digital items. To approach this problem, you might address one particular likely scenario of use or user group. Below are listed some dimensions of this problem that you might consider.

- The library's collections include many different types of digital items (images, video and audio of different types and lengths, 3D imagery, software, digitised books, digitised newspapers, digitised art, digital art...). Different types of content generally lend themselves to different modes of use.
- The library aims to make its collections accessible to as many people as possible, including people with mobility or sensory impairments.
- Everyone in the State of Victoria should be able to benefit from SLV, but it is least accessible to rural communities furthest from Melbourne, some of which experience high levels of social disadvantage. Internet connections are often slow and very expensive in these communities. SLV works in partnership with local public libraries (in suburbs and country towns).
- SLV is an important resource for schools, and an important goal is to make library content accessible to disadvantaged schools, which are likely to be located at some distance from SLV, and to disadvantaged students, who are unlikely to have digital devices of their own.
- It is important that people who do not speak English well and people who are not fluent readers can access the library's collections.
- The needs and goals of first-time visitors may differ from those who have already explored the library's collections.

- In some cases, people may want to search for something specific, but in many instances library visitors want to browse, and may be enticed to explore topics and types of works which they were not previously looking for.
- Different groups of library users have very different needs, interests and constraints. Consider for example families visiting the city for the day, university students, school groups conducting a project, local residents (including families), local history researchers, artists and writers seeking local material, hobbyists, etc.

Do not try to address all of these aspects of the problem in your design! We recommend that you identify a specific group, use scenario or issue to address.

## Recommended Reading List

Technology and HCI researchers have explored libraries, relevant challenges and technological opportunities, from a number of perspectives.

1. Martin, C. (2015, August 19). Who says libraries are dying? They are evolving into spaces for innovation. Retrieved April 6, 2018, from <http://theconversation.com/who-says-libraries-are-dying-they-are-evolving-into-spaces-for-innovation-44820>
2. Chowdhury, G., Poulter, A., & McMenemy, D. (2006). Public Library 2.0: towards a new mission for public libraries as a “network of community knowledge.” *Online Information Review*, 30(4), 454–460. <https://doi.org/10.1108/14684520610686328>
3. Leckie, G. J., & Hopkins, J. (2002). The Public Place of Central Libraries: Findings from Toronto and Vancouver. *The Library Quarterly*, 72(3), 326–372. <https://doi.org/10.1086/lq.72.3.40039762>
4. Pomerantz, J., & Marchionini, G. (2007). The digital library as place. *Journal of Documentation*, 63(4), 505–533. <https://doi.org/10.1108/00220410710758995>
5. Camarata, K., Do, E. Y.-L., Gross, M. D., & Johnson, B. R. (2002). Navigational Blocks: Tangible Navigation of Digital Information. In *CHI '02 Extended Abstracts on Human Factors in Computing Systems* (pp. 752–753). New York, NY, USA: ACM. <https://doi.org/10.1145/506443.506580>
6. Kleiner, E., Rädle, R., & Reiterer, H. (2013). Blended Shelf: Reality-based Presentation and Exploration of Library Collections. In *CHI '13 Extended Abstracts on Human Factors in Computing Systems* (pp. 577–582). New York, NY, USA: ACM. <https://doi.org/10.1145/2468356.2468458>
7. Thudt, A., Hinrichs, U., & Carpendale, S. (2012). The Bohemian Bookshelf: Supporting Serendipitous Book Discoveries Through Information Visualization. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 1461–1470). New York, NY, USA: ACM. <https://doi.org/10.1145/2207676.2208607>

## Background: State Library Victoria Resources and Initiatives

- SLV Catalogue and Collections  
<https://www.slv.vic.gov.au/search-discover>
- SLV Digital Image Pool  
<http://www.slv.vic.gov.au/images?keyword=Melbourne&smt=1>
- SLV #CreateArtHistory  
<https://www.slv.vic.gov.au/create-art-history>  
<https://www.slv.vic.gov.au/interact-with-us/media-centre/winning-artworks-unveiled-state-library-victoria-redbubble-create-art>
- SLV Annual Report  
[https://www.slv.vic.gov.au/sites/default/files/LBV\\_Annual\\_Report\\_2016-17\\_FINAL\\_DX.pdf](https://www.slv.vic.gov.au/sites/default/files/LBV_Annual_Report_2016-17_FINAL_DX.pdf)
- SLV Diversity and Social Inclusion Plan 2017-2020  
[https://www.slv.vic.gov.au/sites/default/files/Diversity\\_social\\_inclusion-FINAL\\_DX.PDF](https://www.slv.vic.gov.au/sites/default/files/Diversity_social_inclusion-FINAL_DX.PDF)
- SLV Vision 2020: Plan for transformation of the SLV's buildings and spaces  
<https://www.youtube.com/watch?v=X4wkdiXXeF8>

## Background: State of the Art

The challenge of enabling public use of digital collections has been explored by a number of interesting projects in the Galleries, Libraries, Archives and Museums (GLAM) sector. See *Museums and the Web* award winners (from past years) as inspiration, e.g. <https://mw17.mwconf.org/glami-winners/> for 2017.

- ArtLens Studio, Cleveland Museum of Art  
<https://mw17.mwconf.org/glami/artlens-studio/>
- Nimble: "A smarter way to read"  
<https://youtu.be/xImDfU9SXYQ>
- The CooperHewitt Pen  
<https://mw2013.museumsandtheweb.com/paper/transforming-the-art-museum-experience-gallery-one-2/>
- Gallery One, Cleveland Museum of Art  
<https://mw2013.museumsandtheweb.com/paper/transforming-the-art-museum-experience-gallery-one-2/>
- Rijksstudio, Rijksmuseum  
<https://mw2013.museumsandtheweb.com/paper/rijksstudio-make-your-own-masterpiece/>
- Explore, National Museums Scotland  
<https://mw17.mwconf.org/glami/explore/>
- Unstacked, State Library of NSW  
<https://theconversation.com/unstacked-revealing-the-hidden-gems-of-the-state-library-of-nsw-76513>
- Library Ideas Launches Movie and TV "Hotspots." *Library Journal*. Retrieved from <https://lj.libraryjournal.com/2017/06/technology/library-ideas-launches-movie-and-tv-hotspots/>
- Oculus Virtual Reality Tech Rolls Out in California Libraries. *Library Journal*. Retrieved from <https://lj.libraryjournal.com/2017/09/technology/oculus-virtual-reality-tech-rolls-california-libraries/>
- Making Virtual Reality a Reality. *American Libraries Magazine*. Retrieved from <https://americanlibrariesmagazine.org/2017/09/01/making-virtual-reality-a-reality/>

## Submission

You will submit the following to the Google Drive folder we have shared with you.

❑ **Video prototype or concept video**

Upload to e.g. Youtube, make it 'public' and provide the URL in your Team ID card.

❑ **Draft paper** in the CHI Extended Abstracts (EA) format (max. 6 pages inc. references)

Convert to PDF format and upload to Google Drive.

❑ **Blog design journal**

Provide the URL in your Team ID Card.

❑ **Mini-Challenge submissions** (optional)

Upload images / documents to Google Drive.

## Instructions

Instructions and guidance for preparing your submission are provided in the following documents:

[Prepare for the Student Design Challenge](#)

[How to Design in 24 hours](#)

[Final Instructions for Participants](#)

## A Note on Data Gathering

Teams are **not permitted to gather primary data from people outside the team**. You can use data gathered from within your team (e.g. brainstorming, reflection, use of design methods such as workshop activities with only your team members). We also recommend you use sources such as library reports, case studies or other publications to help you understand what library users want and the challenges they face.

### **Not allowed:**

- Interviews
- Surveys
- Focus groups
- Cultural probes
- Focus groups
- Participant observation

### **Allowed:**

- Secondary sources (e.g. existing literature, prior work, published reports)
- Publicly available datasets
- Self-reflection, brainstorming, and use of design methods within your team

## Evaluation Criteria

Your submission will be assessed together against the following criteria:

- Demonstrated understanding of the problem. Your submission should provide details of, and give context to, a specific real-world problem related to the brief. (20%)
- Method and approach. The quality of your design process, and use of interaction design methods and theory. (20%)
- Creativity, quality, innovation, and originality of design concept. (40%)
- Quality of submission, including visual style, clarity, and depth. (20%)

The evaluation process is as follows:

- All submissions will be assessed by a jury
- Selected papers will be reviewed by a pool of external reviewers
- The top reviewed submissions will be selected as finalists to attend and present their work at the OzCHI conference.
- A winning submission will be selected by a panel of judges at the OzCHI conference.

## Getting Help

- Firstly, check our Slack #announcements channel. We recommend you [turn on notifications](#) for this channel. We will post updates, clarifications and answers to FAQs here.
- Reach out on Slack to the SDC chairs (Sarah Webber, Romina Carrasco and Zhanna Sarsenbayeva) and your fellow competitors.
- You can email the SDC chairs at [sdc@ozchi.org](mailto:sdc@ozchi.org).

## The Fine Print

By participating in the OzCHI Student Design Challenge, you agree to the publication of your entry (video and online journal) on the OzCHI websites ([ozchi.org](http://ozchi.org) and [ozchi24.org](http://ozchi24.org)). You further grant us the rights to include your video, blog, paper, etc., or parts thereof, in documentation relating to the challenge, sponsorship prospectus and other such material. Any material we publish will be fully referenced and your team will retain the copyright. To receive prizes teams will need to attend OzCHI 2018 and provide proof of student status at the time the challenge took place.